

PATENT COOPERATION TREATY

PCT

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INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)



07 JUN 2005

Applicant's or agent's file reference K 1944 PCT	FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/PEA/416)	
International application No. PCT/US 03/39141	International filing date (day/month/year) 10.12.2003	Priority date (day/month/year) 10.01.2003
International Patent Classification (IPC) or both national classification and IPC B29C33/40		
Applicant 3M INNOVATIVE PROPERTIES COMPANY et al.		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.
2. This REPORT consists of a total of 5 sheets, including this cover sheet.
- ☐ This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).
- These annexes consist of a total of sheets.

3. This report contains indications relating to the following items:

- I ☒ Basis of the opinion
- II ☐ Priority
- III ☐ Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- IV ☐ Lack of unity of invention
- V ☒ Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI ☐ Certain documents cited
- VII ☐ Certain defects in the international application
- VIII ☐ Certain observations on the international application

Date of submission of the demand 03.06.2004	Date of completion of this report 11.04.2005
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465	Authorized Officer Attalla, G Telephone No. +49 89 2399-6004 

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International application No. **PCT/US 03/39141**

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17)*):

Description, Pages

1-22 as originally filed

Claims, Numbers

1-22 as originally filed

Drawings, Sheets

1/7-7/7 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
- ☐ the language of publication of the international application (under Rule 48.3(b)).
- ☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
- ☐ filed together with the international application in computer readable form.
- ☐ furnished subsequently to this Authority in written form.
- ☐ furnished subsequently to this Authority in computer readable form.
- ☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
- ☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
- ☐ the claims, Nos.:
- ☐ the drawings, sheets:

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5. ☐ This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed (Rule 70.2(c)).
- (Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)*

6. Additional observations, if necessary:

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-22
	No: Claims	
Inventive step (IS)	Yes: Claims	
	No: Claims	1-22
Industrial applicability (IA)	Yes: Claims	1-22
	No: Claims	

2. Citations and explanations
- see separate sheet**

Re Item V

1. Document WO-A-0152299 (D1) discloses a flexible mould (cf. page 6, line 10) comprising a layer (the "molding portion") having on the surface thereof a groove pattern of specified shape and size (cf. page 6, line 10-11), said mould layer containing an antistatic agent (e.g. lithium perchlorate; cf. page 7, line 7-8). The subject matter of claim 1 differs from D1 in that a lithium salt of an organic fluorine compound is used as antistatic agent.

The problem solved by replacing lithium perchlorate, which has highly oxidative properties, with a lithium salt of an organic fluorine compound is to improve the preparation and the handling of the antistatically treated moulding material for the grooved layer (c f. description, page 3, line 19-24).

Use of lithium salts of organic fluorine compounds as antistatic agents in coating compositions (cf. US-A-6004484 (D2), col. 3, line 27-55; US-A-5910517 (D3), col. 6, line 13-39) or in plastic compositions (cf. EP-A-603147 (D4), cf. claims 5,6) appears to be well known in the art. Although the above cited documents do not explicitly disclose that such compounds can be more easily manipulated than lithium perchlorate, it seems that a person skilled in the art, who has a general basic knowledge of chemistry, seeking a solution to the above mentioned problem would consider replacing lithium perchlorate with a lithium salt of a compound of the type disclosed in D2-D4, because it is immediately evident to him that the latter compounds do not have the highly oxidant character of the former. Therefore the subject matter of claim 1 does not appear to involve an inventive step, as requested under Art. 33(3) PCT.

2. Also the subject matter of claims 20 and 21, directed respectively to a method of manufacturing of the mould of claim 1 and to a method of manufacturing a fine structure by using the mould of claim 1, differs from D1 for the replacement of lithium perchlorate with a lithium salt of an organic fluorine compound as antistatic agent. Therefore, for the same reasons as in point 1 above, also the subject matter of claims 20 and 21 does not appear to involve an inventive step over D1.

3. The additional features of dependent claims 2 to 19 and 22 are either known from the prior art or they appear to be common measures for a person skilled in the art. Therefore also the subject matter of these claims does not meet the requirements of Art. 33 PCT.

4. Contrary to the requirements of Rule 5.1(a)(ii) PCT, the relevant background art

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disclosed in the document D1 is not mentioned in the description, nor is this document identified therein.